RL/RHM

INSTALLATION INSTRUCTIONS
ACCESSORY BATTERY ELIMINATOR FILTER FOR USE WITH LORAIN "RL" AND "RHM" SERIES FLOTROL RECTIFIERS

1. DESCRIPTION

When LORAIN "RL" and "RHM" Series FLOTROL Rectifiers are operated as battery eliminators, an external DC filter assembly and a plug-on capacitor assembly which is installed on the Regulator and Alarm Card (RAC-A1) in the rectifier, must be used to reduce output electrical noise to 32 dBRN with resistive load.

The filter assembly and the capacitor assembly part numbers are shown in the table below. Refer to Table 1 to determine the BE Filter Assy. number required for a particular rectifier. The Cap. Assy. is provided in the furnished rectifier. (4251-021)

MODEL	QTY.	SPEC. NO.	RECOMMENDED LORAIN BAFFLE FOR USE WITH EACH RECTIFIER	
			BAFFLE FOR 19 INCH RELAY RACK	BAFFLE FOR 23 INCH RELAY RACK
RL30F25 RL50F25 RL100F25	1 1	4826-156 (Filter Assy.) 4251-014 (Cap. Assy.)	4133-023	4133-024
RL200F25	1 1	4826-159 (Filter Assy.) 4251-014 (Cap. Assy.)	N/A	4133-022
RL30F50 RL50F50	1 1	4826-157 (Filter Assy.) 4251-014 (Cap. Assy.)	4133-023	4133-024
RL100F50	1 1	4826-158 (Filter Assy.) 4251-014 (Cap. Assy.)	4133-023	4133-024
RL100D50	1 1	4826-158 (Filter Assy.) 4251-021 (Cap. Assy.)	4133-023	4133-024
RL200D50	1 1	4826-162 (Filter Assy.) 4251-021 (Cap. Assy.)	N/A	4133-022

TABLE 1 (Cont'd)

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MODEL	QTY.	SPEC. NO.	RECOMMENDED LORAIN BAFFLE FOR USE WITH EACH RECTIFIER	
			BAFFLE FOR 19 INCH RELAY RACK	BAFFLE FOR 23 INCH RELAY RACK
RL400D50	1	4826-160 (Filter Assy.)		
RL400E50	1	4251-021 (Cap. Assy.)	N/A	N/A
RHM100D50	1	4826-158 (Filter Assy.)	4133-023	4133-024
	1	4251-014 (Cap. Assy.)		
RHM200D50	1	4826-162 (Filter Assy.)		
	1	4251-014 (Cap. Assy.)	N/A	4133-022
RHM400D50	1	4826-160 (Filter Assy.)		
	1	4251-014 (Cap. Assy.)	N/A	N/A

2. INSTALLATION

The external filter assembly is designed for relay rack mounting, near the FLOTROL Rectifier. When the filter assembly is mounted in a relay rack above the associated Rectifier or above other heat producing equipment, an air deflection baffle should be installed between the filter and the heat producing equipment. When the filter assembly is mounted directly above Rectifiers rated at 100 amperes or less, a 3-1/2 inch baffle is recommended. For Rectifiers rated at more than 100 amperes, a 5-1/4 inch baffle is recommended. Refer to Table 1 for the baffle recommended for use with each Rectifier. All the filter panels, regardless of the associated Rectifier rating, are housed in a single cabinet with the overall dimensions as shown in Figure 1.

To install the battery eliminator filter, turn the Rectifier off, disconnect the load from the Rectifier output, and proceed as follows:

(1) Mount the Battery Eliminator Filter Assembly in the relay rack, lower the rear hinged panel and make the Rectifier and load connections to the terminal lugs POS (top lug) and NEG (bottom lug) observing proper polarity. Refer to the label on the hinged panel for terminal lug sizes and a schematic diagram of the filter assembly.

NOTE: Refer to the Power Data Sheet for the respective FLOTROL Rectifier for Rectifier output terminal identification.

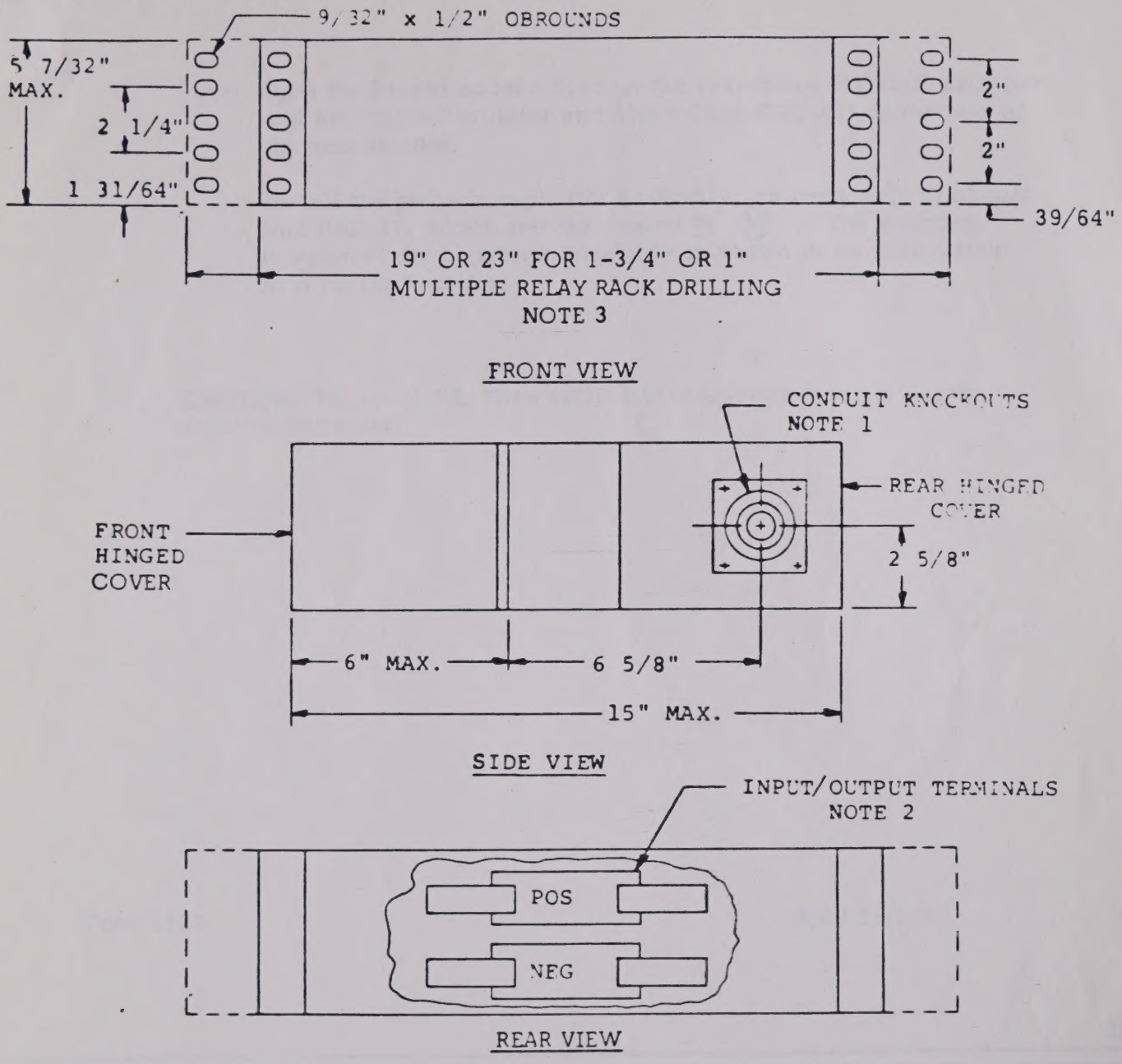

FIGURE 1
OVERALL DIMENSIONS, FILTER ASSEMBLY

NOTE:

1. CONDUIT KNOCKOUTS FOR 1/2" THRU 2-1/2" CONDUIT PROVIDED ON LEFT AND RIGHT SIDES OF CABINET.
2. INPUT AND OUTPUT TERMINALS ARE LOCATED CENTRALLY IN THE REAR OF THE CABINET, IN LINE WITH THE KNOCKOUTS. INPUT AND OUTPUT CONNECTIONS CAN BE MADE THROUGH EITHER SIDE OF THE UNIT.
3. MOUNTING ANGLES ARE REVERSIBLE FOR 19" OR 23" RELAY RACK (1-3/4" OR 1" MULTIPLES). MOUNTING ADAPTERS FOR 27-1/2" CHANNEL RELAY RACK OR 30" UNISTRUT RELAY RACK ARE PROVIDED AS STANDARD EQUIPMENT.

(2) Open the hinged access door on the respective FLOTROL Rectifier and locate the Regulator and Alarm Card (RAC-A1) on the rear of the access door.

(3) Install the plug-on capacitor assembly, on trace pads of circuit card RAC-A1, which are designated J6 Ⓜ . The mounting location of the capacitor assembly is shown in the instruction form for the Rectifier.

CAUTION: The use of B.E. Filter (4826-160) in conjunction with a battery is not recommended.

Form 3822

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